

2002

A review of online career services in the twenty-first century

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Recommended Citation

Saddler, Marsha Yvette, "A review of online career services in the twenty-first century" (2002). *Graduate Research Papers*. 1443.

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A review of online career services in the twenty-first century

Abstract

The need to examine and explore the status of career services online is not only timely, but necessary in the ever-changing technology movement that has affected the very culture of student affairs in American higher education. The purpose of this paper is to accomplish that task by providing a synopsis of research gathered from three main categories of online career services, and to discuss how using the Internet to deliver these services can enhance the career development of college students.

A REVIEW OF ONLINE CAREER SERVICES IN THE TWENTY-FIRST
CENTURY

A Research Paper

Presented to

The Department of Educational Leadership, Counseling,
and Postsecondary Education

University of Northern Iowa

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts in Education

By

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May 2002

This Research Paper by: Marsha Yvette Saddler

Entitled: A REVIEW OF ONLINE CAREER SERVICES IN
THE TWENTY-FIRST CENTURY

Has been approved as meeting the research paper requirements for the Degree of Master of Arts in Education.

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Introduction

Ever since the World Wide Web has become a part of over 100 million homes and businesses in the United States, the Internet has become the vehicle of choice for communicating, banking, networking, and even shopping. This technological paradigm has not been excluded from American higher education. Technology has become an integral part of higher education, and the Internet is a critical aspect of this movement. One of the most formidable and pervasive changes taking place on college and university campuses concerns the impact of technology on students, faculty, and administrators (McRae, 1999).

Today's college and university students have a vastly sophisticated familiarity and knowledge in relation to computers, multimedia, and the Internet. They have grown up with technology in a fast and responsive world and are comfortable with self-service options that allow them to have a world of information at their fingertips (Beede & Burnett, 1999). Peter Sacks (1996) states that these students appear more

insistent, more focused and specialized, and more critical of student services than ever before. Students are demanding services that meet their expectations for service delivery. Postsecondary institutions use technology in many ways to accommodate the changes that the current college students bring to higher education, such as distance education, electronic mail, and WebCT. These initiatives have changed the way in which students learn and receive information in college.

This phenomenon has a direct effect on student affairs administrators. It is critical for them to stay abreast of the many changes occurring on college and university campuses today, especially since these professionals are committed to the development of the whole student by connecting their academic and co-curricular lives. A few of the automated student services that have been made available to students through student information systems provide telephone and Internet registration, web access to student records, web based admission packages, bedroom

Internet ports, and Free Application for Federal Student Aid web accessibility (Volchok, 2000; Zelesky, 2000). These services alone have made processes much easier for college students and student services practitioners alike, without causing an enormous detriment to the foundational paradigm in the field of student affairs: face-to-face communication (Barratt, 2000).

Although these technological impacts have been put into place and utilized for the past few years, there is no other area of the student affairs profession that has offered the highest percentage of services offered online than career services (McRae, 1999). Career services are able to reach students and assist them in three major areas with the use of technology and the Internet: Recruiting and Job Hunting Services, Computer-based Career Guidance Systems, and Career Planning Services. All of these resources that career services has employed work towards the ideal of using the Internet as a resource for enhancing career development in students.

Therefore, the need to examine and explore the status of career services online is not only timely, but necessary in the ever-changing technology movement that has affected the very culture of student affairs in American higher education. The purpose of this paper is to accomplish that task by providing a synopsis of research gathered from the three main categories of online career services mentioned above, and to discuss how using the Internet to deliver these services can enhance the career development of college students.

Recruiting and Job Hunting Services

On-line recruiting is the most common and wide-ranging category of on-line career services. This process provides a two-way service for both job seekers and employers. Just like any other industry, human services organizations are utilizing the Internet to support businesses (McShulskis, 1997). The majority of the human resource management services offered on the Internet deal in the area of recruiting. According to Mike Frost (1997), director

of on-line services for the Society for Human Resource Management, "The web has created the ability for instant information, instant recruiting, and instant networking" (p. 4). Therefore, when the human resource departments of businesses combine with career services in higher education institutions, an explosion of Internet recruiting, also known as cyber-recruiting and e-recruiting, and job search is created. The Internet makes the frustrating and tedious processes of job hunting and hiring a lot simpler by connecting employers and students through career departments within colleges and universities.

At this point, career services not only provides assistance for college students by enhancing their capabilities to network with employers on-line, they also help employers find prospective, educated employees from institutions around the country. In order to accomplish these responsibilities successfully, career services must remain current regarding the many recruiting and job hunting sites that are made available on the Internet. As a result,

students who attend institutions of higher learning are consistently aware of the job search opportunities that are available to them.

Companies like TMP Worldwide and Career Builder are the leading on-line recruiting services that have launched two of the largest on-line job sites, The Monster Board and Careerbuilder. TMP Worldwide is an interactive company with a unique suite of Global Career Solutions and a client base that includes more than 90 of the Fortune 100 and more than 480 of the Fortune 500 (<http://www.tmp.com/TMP800/aboutus/aboutinfo.asp?type=who>). The Monster Board, located at <http://www.monster.com>, brings applicants and employers together through on-line recruiting day or night, at home or in the office. Career Builder is a leading on-line source structured to maximize recruitment and optimize job searches for candidates anywhere in the nation. Within Careerbuilder, job seekers are exposed to more than 300,000 continuously updated jobs, and 25,000 of the top employers hire the talent they need. More than 6 million individuals

visit Careerbuilder each month (<http://www.headhunter.net/JobSeeker/AboutUs/Index.htm>).

Through the Monster Board and Careerbuilder, applicants register job preferences, including their geographic and professional choices, as well as their qualifications by posting resumes. The information is screened for its compatibility with positions offered within the job database. Candidates receive notification via e-mail if a match is found. Additionally, these sites contain search engines, which categorize thousands of job listings according to location, job type, or salary range, which makes searching much easier. In a study of the top 100 colleges and universities selected as most wired by Yahoo Internet Life, a national publication, and Peterson's Publishing, 100% of the institutions provided their students with access to on-line career services such as these (McRae, 1999). (See Table 1 in the Appendix for Internet locations of more recruiting and job search sites.)

Moreover, many colleges and universities have employed their own on-line recruiting methods. An example of one of these projects is evident on the University of Northern Iowa's website through their career services link. The Career Center at this institution has a service known as the UNI CareerLink that is accessible to UNI students. Registration with UNI CareerLink provides UNI students with a strong link to prospective employers as well as access to resources that are critical to a successful search for a job or internship opportunity. Students can utilize the UNI CareerLink WebRegistration and WebResume system 24 hours a day. The registration process can even be completed on-line. Although the Career Center has been utilizing a web-based recruiting system for a number of years, the UNI CareerLink was uploaded and available to students in July 2001. This on-line e-recruiting system was also put into operation by the Career Center to allow students to:

- Put resumes on their website and make it available to over 1000 employers who have been given access by their office.
- Interview with prospective employers on campus. UNI CareerLink allows qualified students and alumni to sign up over the Web for on-campus interviews.
- Be referred directly to positions at employers' request. UNI CareerLink allows the generation of resume referrals based on employer needs and allows employers to access this data directly over the Web.
- Access job and internship vacancies. Vacancies are posted on UNI CareerLink by Career Center staff and employers. Full-time, co-op/internship and graduate assistant/fellowship listings are included, as well as other experiential opportunities.
- Apply electronically for positions. UNI CareerLink allows you to send electronic applications for vacancies posted in the system.

(http://www.uni.edu/careercenter/careerlink/er_registration.html)

The Virtual Career Fair is another model of an on-line e-recruiting system located at the University

of Florida's website through their career services link. For access to this university's method of connecting students with employers, students must first be registered with GatorTRAK. GatorTRAK is an on-line recruiting mechanism made available through the college's Career Resource Center that enables students to upload their resumes and transcripts, search for interviews, submit their resumes, and sign up for on-campus interviews with employers (<http://www.crc.ufl.edu/gatortrak/newuser.html>).

After students have registered with this on-line career service, they have the opportunity to participate in the Virtual Career Fair. The Virtual Career Fair is an online version of a traditional Career Fair, an event where students and alumni network with potential employers, where students view 122 job listings and submit resumes via the web to 26 companies from 31 different industries (Bragg, 2001).

This is how the service works: (1) students view a page of various industry types (Sales/ Management, Healthcare, Engineering, etc), (2) click on their areas of interest, (3) peruse virtual booths that contain job listings, (4) read the job descriptions and company information, (5) submit their resume via

the web to employers for positions that interest them, and (6) follow-up with the recruiter by using the contact information provided (http://www.crc.ufl.edu/virtual_career_fair/VGCF-Info.html).

Students are capable of visiting the Virtual Career Fair 24 hours a day throughout the duration of the event and thus avoid the scheduling conflicts that can occur during traditional career fairs (Bragg, 2001). Like the UNI CareerLink, the Virtual Career Fair is a fairly new concept for the Career Resource Center at the University of Florida. This institution held its first on-line career fair during the summer of 2001, from July 16 to August 17. According to Bryan Patterson, the Assistant Director for Career Events at the university, "It's the wave of the future. I hope to accomplish a new way of helping students get connected by providing a more accessible venue to contact employers" (Bragg, 2001, p. 1-2).

There are many benefits that recruiting on-line provides for employers and job seekers at colleges and universities. Some of these include reaching a larger audience, having more geographical exposure, and

providing a more economical process for everyone (Mosley, 1998). Electronic registries offered through the Internet sites or career departments in postsecondary institutions allow staffing companies to establish relationships more rapidly with job applicants than any other means of recruiting (Saftner, 1997).

Although these positive aspects of on-line recruiting may exist, they have not replaced traditional recruitment methods. Hence, it is still imperative for career service areas of student affairs to assist students in their career decision making process before they reach the point of job seeking.

Computer-Based Career Guidance Systems

Computer-based career guidance systems have been a reality in the United States for the past 35 years (Harris-Bowlsbey, 1992). The use of these mechanisms assists career counselors and advisors with guiding students through their career development process. They made their start in the late 1960s, funded by the state, federal, and other foundation grants, and

created by those who felt integrating technology with career development in order to aid individuals with their decision making was significant. This type of career assistance became a part of many college and university career departments by the late 1980s (Katz, 1990).

Computerized career systems are made up of four basic components, an outline of the system, assessment tools, databases, and search strategies. The outline of the system expresses the developer's theory of what individuals need in order to reach developmental tasks or make informed career decisions (Harris-Bowlsbey, 1992). This area includes activities that assist the learner in learning more about their self-interests, abilities, and/or values; to relate this self-information to available occupational options; to teach and apply good decision-making principles to the making of choices; and to provide significant databases that represent options for further education, job placement, or other implementation steps (Harris-Bowlsbey, 1992).

The second component of computer-based career guidance systems are assessment tools. They contain information about the user, such as interests, abilities, experiences, personality type, and/or values, in order to create the linkage between the user and possible occupational options. The assessment data may either be obtained by taking inventories on-line, or by entering the results of having taken them in print form. Databases, the third section of computerized career systems, are files of frequently-updated and accurate information about areas that the users choose to learn more about, for instance, occupations, schools, military programs, programs of study, financial aid opportunities, apprenticeships, and employers. They are structured files of elements of data that people need in order to make well-informed decisions (Harris-Bowlsbey, 1992). The last part of this type of technological career service is search strategies. Within this sector, users of computer-based systems can classify and prioritize characteristics that they value most. Search

strategies can allow users to select options that meet their criteria and identify those that are worthy of further investigation.

One of the most popular computer-based interventions being utilized today throughout career services in higher education is Discover. Discover is a developmental guidance process introduced more than 20 years ago to help individuals identify their strengths and needs, as well as build a plan based on their personal profiles. It provides economical and efficient assessments of an individual's career-relevant interests, job values, and abilities. Discover features large amounts of information about occupations into six clusters, based on work tasks that can help individuals focus on preparing for meaningful and appropriate employment. This computer-based career guidance system also includes:

- An occupation database that provides detailed information about hundreds of occupations in the current U.S. labor market; a searchable file that includes detailed descriptions of typical college

courses, related majors, related occupations, and types of schools that offer the programs;

- Educational options that identify postsecondary education or training alternatives for their career choice;
- School database that provides information about virtually all two-year and four-year colleges, graduate/professional schools, most vocational-technical schools, and a detailed search process to identify the schools that have the features each individual wants;
- Financial aid/scholarship searchable database off financial aid sources and provides an estimate of federal eligibility, based on family or personal financial information;
- Job-seeking skills that prepare individuals for a successful job search by learning good interviewing skills, writing a resume and cover letter, etc.;
- Administrator reports Helps monitor the amount and type of system use by individuals and by groups, tracks individuals' career plans, provides lists of individuals by occupational cluster or interest, and much more.

(<http://www.act.org/discover/overview/benefits.html>)

Discover has proven to have many positive effects on the career development of students. Several studies support the effectiveness of Discover as a method for increasing users' career decidedness, the degree to which an individual is decided on entering a particular career, and occupational certainty, an individual's commitment to a specific job choice (Brownfield, 1987; Fukuyama et al., 1988; Gilman, 1987; Glaize & Myrick, 1984). Discover offers superior results as a method to increase occupational certainty when compared to other computer-assisted career guidance programs. According to a study conducted by Sampson et al. (1993), some participants used Discover and others used another computer assisted career guidance program. The researchers found that those that used Discover increased their occupational certainty, whereas the occupational certainty of those who used the other program did not change. In addition, there have been several other studies that have revealed that Discover can be an

effective tool to increase users' career maturity, an individual's readiness to cope with age-appropriate career development tasks (Garis & Bowlsbey, 1984; Langley & Schepers, 1990; Luzzo & Pierce, 1996; Nocella, 1985; Yonkovig, 1987).

Discover has also been found to help users successfully progress through the various stages of career development, as outlined by Donald E. Super (Campbell, 1983; Garis & Bowlsbey, 1984; Garis & Niles, 1990; Kapes et al., 1989; Nocella, 1985; Yonkovig, 1987). Donald Super's most central statement of Super's theory relates to the importance of an individual's self-concept in the process of career choice and development (Super et al., 1963). Also, in Super's theory, individuals seek to live their vocational self-concept through their choice of work (Harris-Bowlsbey et al., 2000). The five specific life stages related to career development in Super's theory are Growth, Exploration, Establishment, Maintenance, and Disengagement.

This computerized career information delivery system increases the self-efficacy, or confidence, in a student's ability to successfully engage in the career decision making process, as well (Fukuyama et al., 1988). Additionally, the results from several studies show evidence of Discover's effectiveness in increasing users' vocational identity (Barnes & Herr, 1998; Gilman, 1987; Kirschner, 1989; Sampson et al., 1993; Shahnasarian & Peterson, 1986). This means that individuals have a clear idea of their career-related interests, abilities, goals, and personality after using this program.

The final benefit that was found in students who utilize the Discover system involves career exploration behavior. The frequency with which a person engages in career information-seeking behavior, including making use of career resources and consulting with others about career information, was shown to be enhanced in those students who used Discover as opposed to those who had not used the system in their career decision making process

(Campbell, 1983; Garis & Bowlsbey, 1984; Gilman, 1987). This is partly due to the direct access to information and the quick and easy retrieval of current, comprehensive, meaningful information.

Other Computerized Career Information Delivery Systems that are being utilized on the Internet and in colleges and universities as on-line career services today are, Visions, Visions Plus, CareerNet Visions, Choices, Coordinated Occupational Information Network (COIN), the Guidance Information System (GIS), the System of Interactive Guidance and Information Plus (SIGI Plus), and the Computerized Version of the Self-Directed Search. Although all of these programs have interactive components that provide self-assessment activities for interests, temperaments, work values, and other work-related factors, career service counselors must be sure that they are not administering these computer-based interventions as a uniform treatment for students, but rather are prescribing them in a way that take into consideration the unique personality characteristics of each client

(Lenz et al., 1993). Also, individual career planning and counseling is vital for students in understanding what these assessment tools can tell them about their lives and their careers, and how they can effectively use them to improve their career development and accomplishing their career goals.

Career Planning Services

This section of on-line career services is one that has been in existence for the shortest time. Within the past few years, career planning services on the World Wide Web have emerged in the areas of college and university websites and independent Internet companies. The information provided on academic sites has dramatically improved. Such sites include information about career paths and possibilities, and not only focus on the academic programs of an institution (Stevens & Lundberg, 1998). Many career services offices at universities have consolidated on-line career counseling information via their Web home pages and links to other websites located on the Internet (Levenson, 1995). There are

also a few advantages to involving technology in the career planning and advising services that are given in higher education. First, career counselors who are fluent in using the Internet will have a highly interactive mode of communication and quick access to current sources of information (Stevens & Lundberg, 1998). This benefit can stimulate both the counselors' and the students' interests, and the student-counselor communication can improve. Communication among counselors can become easier also, fostering the sharing of ideas (Stevens & Lundberg, 1998). New resources are readily available to career counselors, and the potential to develop new relationships on a global scale emerges for them as well.

Through independent Internet companies that have developed websites to serve the campus market, telementoring is becoming an increasingly popular way for students to seek career advice and counseling by using the Internet. Telementoring is either formal or informal, and consists of exchanges between students

and professionals via e-mail or the World Wide Web (Bennett, 1997). The National School Network Exchange has a site offering telementoring information and opportunities. Educators are combining the concept of mentoring with the reach and convenience of recent telecommunications technology (Goldman, 1997). Mentoring involves an experienced person giving guidance, knowledge, and encouragement to someone who is learning (Goldman, 1997). With the advent of telecommunications, more students can become involved in a positive relationship with a professional, who can provide attention, academic assistance, validation, advice, and support. Mentors who may not have time for face-to-face meetings find telecommunications affords them the opportunity to still participate and share their expertise with students (Goldman, 1997). Mentors can be found through professional associations or local corporations. Some telementoring programs are constructed on career guidance and personal development (Bennett, 1997).

Cybercoaching is another new approach to utilizing the Internet to enhance career planning. This is an extremely new concept that has become a part of the Internet, but is becoming a more popular way for individuals to gain advice and encouragement. Cybercoaching uses the World Wide Web or e-mail as a way of motivation (Murphy, 1998). Pep talks include advice on securing job interviews and practicing interviewing skills.

One website entitled America's Career InfoNet offers links to related information including career guidance and counseling, in addition to information on earnings, job duties, training, and employment outlook (<http://www.acinet.org/acinet/>). Also, the Career Development Manual website is an interactive career planning guide that begins with self-assessment, continues through to employment contacts, and ends with career and life planning (<http://www.adm.uwaterloo.ca/infocecs/CRC/manual-home.html>). (See Table 2 in the Appendix for Internet locations of more career planning sites.)

When accessing and using career services in the area of counseling on the Internet through independent companies, it is important for career counselors to be aware of sites that are created for the primary purpose of obtaining commercial benefits. Websites that fall into this category often do not have the students' nor the institutions' best interest in mind. There are certain criteria that practitioners should try to follow when using the Internet for career planning, investigate the sources authority and thoroughly examine the accuracy of the content information (William, 1998). When investigating the authority, make sure that the credentials of the person or organization that posts the information is checked. In relation to the content information, perhaps it can be compared with other resources that are considered valid and reliable, try to note how regularly the information is updated.

Conclusion

Student affairs professionals should carefully consider the technological service needs that current

students are requiring in American higher education. As the area of career services has shown in numerous efforts in the past and present, the World Wide Web can enhance many new types of learning and development in college students. There are numerous websites on the Internet devoted to career services. A great portion of what is offered consists of job placement and recruiting efforts, enabling students to explore large databases and search engines for job openings and to post resumes. The use of computer-based career guidance systems have expanded the population of individuals who receive career assistance across the total life span, from elementary to college to the adult years, and allows individuals to make choices related to school, work, and other life roles that are valued. Career planning information on the Internet has progressed in recent years to reach populations of students through private companies and postsecondary institutions. Overall, all of this information has led to the increased popularity of using the Internet as a resource for career development.

Appendix

Table 1 - Recruiting and Job Hunting Websites

Site Name	Internet Address
Best Jobs USA	http://www.bestjobsusa.com/index-jsk-ie.asp
Careerbuilder	http://www.headhunter.net/JobSeeker/Index.htm?siteid=cmhome
Careershop	http://www.careershop.com/
CareerSite	http://www.careersite.com/
CareerWeb	http://www.careerweb.com/jobs/
Hot Jobs	http://www.hotjobs.com
Monster	http://www.monster.com
NationJobs Network	http://www.nationjob.com
Net Temps	http://www.net-temps.com/
Preferred Jobs	http://www.preferredjobs.com
SearchEase	http://www.searchease.com/default.htm

Table 2 - Career Planning and Advice Websites

Site Name	Internet Address
America's Career InfoNet	http://www.acinet.org/acinet/
Career Development Manual	http://www.adm.uwaterloo.ca/infocecs/CRC/manual-home.html
CollegeView	http://www.collegeview.com
Creative Job Search	http://www.mnwfc.org/cjs/cjs_site/index.htm
JobHunters Bible	http://www.jobhuntersbible.com/index.html
Jobweb Resource	http://www.jobweb.com/resources/library/
Mapping Your Future	http://mapping-your-future.org/planning/
Mind Tools	http://www.mindtools.com/index.html

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